

ad  
(a) selecting an oligonucleotide primer having a 3' terminus consisting of at least 20 contiguous nucleotides selected from the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3) or at least 20 contiguous nucleotides complementary to the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3),

(b) hybridizing the oligonucleotide primer to the single stranded nucleic acid in the sample, and

(c) performing a nucleic acid polymerase reaction wherein the hybridized oligonucleotide primer primes the synthesis of a second strand complementary to the single stranded nucleic acid to form an amplified nucleic acid.--

#### REMARKS

Claims 1-19 are pending in this application. Claims 1-19 are now canceled and new claims 20-33 are added. Thus, claims 20-33 are active in the case.

#### Amendments

The specification is amended to recite the file history of the present application.

The Sequence Listing in the specification is amended to provide separate SEQ ID numbers for the paired amino acid and nucleotide sequences given a common number in the original Sequence Listing. The specification is further amended to refer to the correct SEQ ID numbers.

Claims 1-19 are canceled and new claims 20-33 are added in order to introduce claims relating to the subject matter of non-elected Claim Group III set forth in the Restriction Requirement and Office Action mailed March 19, 1997 in parent application U.S. Serial No. 08/701,265. Claim Group III encompassed claims 27-40 of parent application U.S. Serial No. 08/701,265, drawn to nucleic acid molecules encoding PF4AR polypeptides, vectors and host cells containing such nucleic acid molecules, and methods of using the same.

Claim 20 is drawn to "[a]n isolated nucleic acid molecule encoding a platelet factor 4

superfamily receptor (PF4AR) polypeptide comprising a stretch of at least 10 contiguous amino acid residues selected from an extracellular region of a receptor polypeptide having the amino acid sequence of Fig. 4 (SEQ ID NO. 4)", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 21, lines 8-20, and page 21, line 31 to page 22, line 12 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 7 of parent application Ser. No. 07/810,782 filed December 19, 1991, now abandoned, the entire disclosure of which is incorporated by reference on page 1, lines 12-15 and page 61, lines 3-4 of the present application.

Claim 21 is drawn to the "nucleic acid molecule of claim 20 wherein the extracellular region is the N-terminal extracellular region", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 21, lines 8-20, and page 21, line 31 to page 22, line 12 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 7 of parent application Ser. No. 07/810,782.

Claim 22 is drawn to the "nucleic acid molecule of claim 20 wherein the PF4AR polypeptide comprises an amino acid sequence spanning an extracellular region of a receptor polypeptide having the amino acid sequence of Fig. 4 (SEQ ID NO. 4)", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 21, lines 8-20, and page 21, line 31 to page 22, line 12 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 7 of parent application Ser. No. 07/810,782.

Claim 23 is drawn to the "nucleic acid molecule of claim 22 wherein the extracellular region is the N-terminal extracellular region", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 21, lines 8-20, and page 21, line 31 to page 22, line 12 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 7 of parent application Ser. No. 07/810,782.

Claim 24 is drawn to the "nucleic acid molecule of claim 20 wherein the PF4AR polypeptide comprises the amino acid sequence of Fig. 4 (SEQ ID NO. 4)", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 13, lines 14-25, and page 21, line 31 to page 22, line 12 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 7 of parent application Ser. No.

07/810,782.

Claim 25 is drawn to a "DNA molecule comprising a stretch of at least about 45 contiguous nucleotides selected from or complementary to the DNA sequence of Fig. 4 (SEQ ID NO. 3)", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, and page 13, lines 14-25 and in Example 2 of the specification and in Fig. 4, and in original claims 6-8 of parent application Ser. No. 07/810,782.

Claim 26 is drawn to the "DNA molecule of claim 25 comprising the DNA sequence of Fig. 4 (SEQ ID NO. 3) or its complement", as supported, at least, on page 4, line 30 to page 5, line 2, page 6, lines 22-26, and page 13, lines 14-25 and in Example 2 of the specification and in Fig. 4, and in original claim 7 of parent application Ser. No. 07/810,782.

Claim 27 is drawn to the "nucleic acid molecule of claim 20 operably linked to a promoter", as supported, at least, on page 4, line 30 to page 5, line 2, page 5, lines 3-6, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 14, lines 11-32, page 21, lines 8-20, page 21, line 31 to page 22, line 12, and page 32, line 20 to page 35, line 16 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 9 of parent application Ser. No. 07/810,782.

Claim 28 is drawn to an "expression vector comprising the nucleic acid molecule of claim 20 operably linked to control sequences recognized by a host cell transformed with the vector", as supported, at least, on page 4, line 30 to page 5, line 2, page 5, lines 3-6, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 14, lines 11-32, page 21, lines 8-20, page 21, line 31 to page 22, line 12, and page 28, line 23 to page 37, line 19 and in Example 2 of the specification and in Fig. 4, and in original claims 6 and 10 of parent application Ser. No. 07/810,782.

Claim 29 is drawn to a "host cell transformed with the vector of claim 28", as supported, at least, on page 4, line 30 to page 5, line 2, page 5, lines 3-6, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 14, lines 11-32, page 21, lines 8-20, page 21, line 31 to page 22, line 12, page 28, line 23 to page 37, line 19, and page 37, line 20 to page 41, line 4 and in Example 2 of the specification and in Fig. 4, and in original claims 6, 10 and 11 of parent application Ser. No. 07/810,782.

Claim 30 and 31 are drawn to a "method of using the nucleic acid molecule of claim

20 for the expression of the PF4AR polypeptide encoded by the nucleic acid molecule, comprising culturing a host cell transformed with a vector comprising the nucleic acid molecule operably linked to control sequences recognized by the host cell under conditions that allow expression of the polypeptide" and to "recovering the polypeptide from the host cell", respectively, as supported, at least, on page 4, line 30 to page 5, line 2, page 5, lines 3-10, page 6, lines 22-26, page 11, line 7 to page 12, line 11, page 14, lines 11-32, page 21, lines 8-20, page 21, line 31 to page 22, line 12, page 28, line 23 to page 37, line 19, page 37, line 20 to page 41, line 4, and page 41, line 5 to page 44, line 23 and in Example 2 of the specification and in Fig. 4, and in original claims 12 and 13 of parent application Ser. No. 07/810,782.

Claim 32 is drawn to a "method for determining the presence or absence of a platelet factor 4 superfamily receptor (PF4AR) nucleic acid in a sample, comprising the steps of: (a) selecting a probe comprising at least 20 contiguous nucleotides selected from the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3) or at least 20 contiguous nucleotides complementary to the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3), (b) hybridizing the probe to any PF4AR nucleic acid present in the sample to form a probe/PF4AR nucleic acid complex, (c) detecting the presence or absence of the probe/PF4AR nucleic acid complex in the sample, and (d) determining the presence or absence of PF4AR nucleic acid in the sample based on the result of step (c)", as supported, at least, on page 5, lines 10-11, page 13, lines 14-25, page 16, line 20 to page 17, line 21, and page 55, lines 22-27 and in Example 2 of the specification and in Fig. 4, and in original claim 14 of parent application Ser. No. 07/810,782.

Claim 33 is drawn to a "method of amplifying a platelet factor 4 superfamily receptor (PF4AR) single stranded nucleic acid in a sample, comprising the steps of: (a) selecting an oligonucleotide primer having a 3' terminus consisting of at least 20 contiguous nucleotides selected from the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3) or at least 20 contiguous nucleotides complementary to the nucleic acid sequence of Fig. 4 (SEQ ID NO. 3), (b) hybridizing the oligonucleotide primer to the single stranded nucleic acid in the sample, and (c) performing a nucleic acid polymerase reaction wherein the hybridized oligonucleotide primer primes the synthesis of a second strand complementary to the single stranded

nucleic acid to form an amplified nucleic acid", as supported, at least, page 13, lines 14-25, page 16, line 20 to page 17, line 21, and page 18, lines 12-20 and in Example 2 of the specification and in Fig. 4, and in original claim 15 of parent application Ser. No. 07/810,782.

No new matter is believed to be added hereby.

Applicants respectfully request entry of the above amendments and early examination of the application.

Respectfully submitted,  
GENENTECH, INC.

Date: June 24, 1998

By: 

Richard B. Love  
Reg. No. 34, 659

1 DNA Way  
So. San Francisco, CA 94080-4990  
Phone: (650) 225-5530  
Fax: (650) 952-9881

064230" E9040T60